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A MONTHLY REVIEW OF CURRENT OPHTHALMOLOGY.

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& Medical
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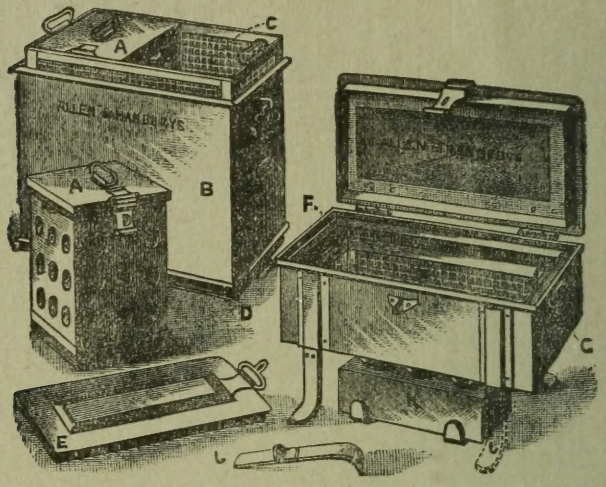

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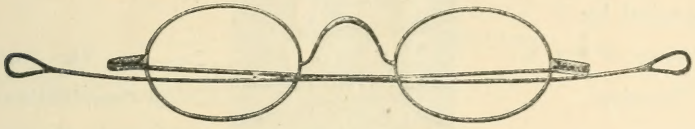

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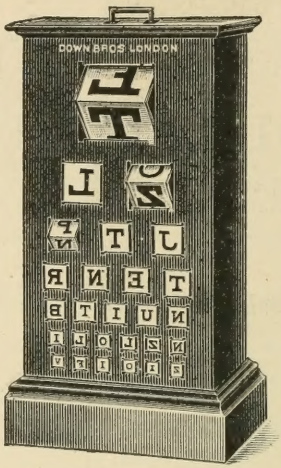

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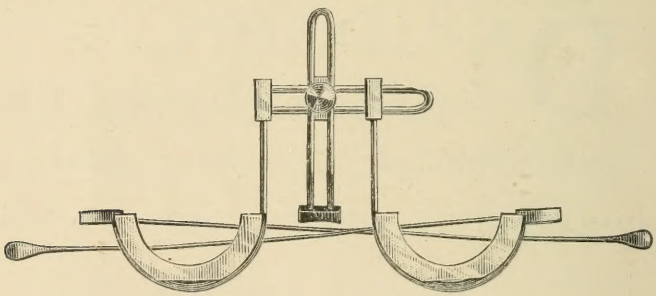

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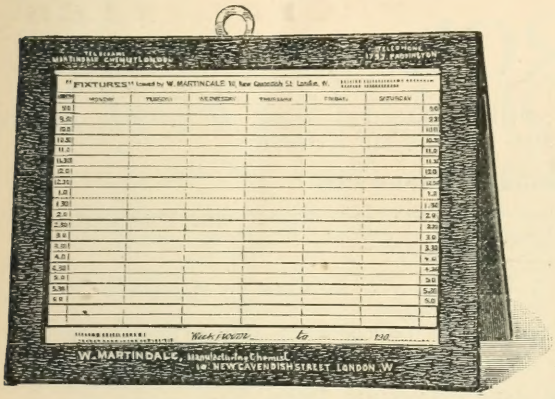
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VOL. I.—No. 6.] *DECEMBER, 1903.* [ONE SHILLING

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ORIGINAL COMMUNICATIONS.

A CASE OF ENUCLEATION FOR GLIOMA OF THE RETINA IN 1892: NO RECURRENCE OF THE DISEASE TO DATE (1903).*

BY CHARLES A. OLIVER, A.M., M.D.,

SURGEON TO WILLS' EYE HOSPITAL, PHILADELPHIA, PA., U.S.A.

ON the first day of August, 1892, Dr. Robert G. Moon of this city kindly brought A. L., a girl, aged 9½ years, to me at Wills' Hospital. Dr. Moon's notes of the case are as follows:—"I first saw A. L., aged nine and a-half years, in consultation with Dr. R. Wernick, of Wernersville, Penna., on the 20th June, 1892. About two years previously she awoke in the middle of the night with 'awful' pain in her right eye and in the morning she was unable to bear the light. She

[*Read before the October*, 1903, *Meeting of the Section on Ophthalmology of the College of Physicians of Philadelphia.*]

was at once attended by a practitioner of the neighbourhood, but the severe pain lasted for two weeks longer. At the end of that time it began to subside, but she was apparently deprived of the sight of the affected eye. The eyeball had ever since been inflamed and there was great intolerance of light, which continued until the time I saw her, when she presented the following appearances. The child was evidently delicate and anæmic, with slightly enlarged cervical glands. There were redness and slight swelling of the margins of the right eyelids. The eyelids were almost constantly closed, as if light distressed her. In the right eye there was general injection of the scleral vessels, and deep red vascularity of the ciliary region. The ciliary veins were engorged and of a purplish hue, the cornea was quite transparent, the iris was hardly distinguishable, and in the pupillary area there was a nodulated opacity of a reddish yellow colour, covered with minute blood vessels. The tension of the globe was + I. The vision in this eye was completely lost. The left eye was intolerant of light, but the globe was normal in appearance and tension. Enucleation of the right eye was recommended, but the operation was deferred for a time. Meanwhile, she was ordered syrup of the iodide of iron and cod liver oil emulsion. When seen again on the 18th July, 1892, the right globe had increased in tension (+ 2). Its anterior chamber was almost abolished, the iris was reduced in breadth to a very narrow ring of a dull bluish gray colour surrounding a dense reddish-yellow opaque body presenting three projecting bosses divided by three well-marked depressions radiating from the centre of the pupillary area. There was general injection of the ocular tunics and fine vessels penetrated the circumference of the cornea. There was no pain in the eyeball, but there were slight photophobia and lacrymation. The left eye presented no morbid appearance beyond slight photophobia and lacrymation."

When the case was brought to me, examination showed that the tension of the affected eye was increased to an almost stony hardness, this being more pronounced in different situations. The anterior scleral veins were enlarged and tortuous. There was but little conjunctival congestion. The cornea was steamy, translucent in places, and markedly anæsthetic. The lens was cataractous, partially absorbed, and protruding through a widely, although evenly, dilated pupil. The anterior summit of the lens, which showed isolated thickenings of the overlying capsule, was jammed against the posterior surface of the cornea. The narrow rim of iris tissue was degenerated and filled with minute yellowish bodies of a

granular type. With the ophthalmoscope, a faint yellowish glare could be seen in places through the partially opaque lens. There was no ciliary tenderness.

The left eye was normal in every respect.

The patient was placed under the influence of ether, and the eyeball was enucleated, the retrobulbar portion of the optic nerve being severed as close as was possible to the optic foramen. The exposed portions of the orbital cavity were subjected to the closest scrutiny, and the cut end of the optic nerve was cauterized. Recovery was rapid and uneventful, the child being discharged from the hospital in about seven days' time. The excised globe was preserved for study under the microscope.

Having heard nothing further of the patient, I addressed a note of inquiry to Dr. Moon in the summer of the following year, to which he replied as follows :—

"When I last saw the child on the 20th June, 1893, at her home in Berks County, I found her greatly improved in general health. Whilst still looking somewhat pale, she had grown considerably, she had gained flesh, and there was no longer any enlargement of the cervical glands. She had been regularly taking cod-liver oil emulsion since the operation until the bad weather set in. There was no tenderness or tumefaction of the abdomen, and until three weeks previously the bowels had acted regularly; but she had then a troublesome diarrhœa which lasted six days, and was only checked by 'clover tea.' The 'stump' in the right orbit was of a healthy pink colour, but its movements were somewhat limited. There were no nodules to be felt anywhere in or about the orbit, and the operation appeared to have been perfectly successful in checking the disease. The left eye was quite healthy, with normal pupil, and iris acting well to light and accommodation. There was no longer any photophobia. Vision equalled $\frac{5}{5}$, and the patient read No. 1 type with perfect ease."

Three years later (October 23rd, 1895), Dr. Moon sent me the following note :—

"June 7th, 1895, A. L. came to Philadelphia for the purpose of having a new artificial eye fitted. She was in splendid health, having developed into a hearty strong girl with stout body and limbs. Her complexion was ruddy; she had no cough, or any apparent ailment. The soft parts of the orbit were perfectly healthy; without nodules or thickenings. There was no disturbance of the vision of the left eye."

The specimen was given to Drs. William Campbell Posey and Edward A. Shumway who, very kindly sent to me the following report :—

"Measurements of the globe: antero-posterior diameter, 20 mm.; transverse diameter, 23 mm. Microscopically, the retina is seen to be detached, and to be the seat of a tumour which involves its entire extent, from the optic nerve entrance forward to the lens. The tumour-mass surrounds the lens, and has invaded the anterior part of the choroid, the ciliary processes, and the iris. The sub-retinal space is filled with a homogenous exudate, which contains a round darkly-pigmented mass, 8 mm. in diameter on the inner side of the globe. This mass is in contact with the tumour behind the lens, with the detached and thickened retina, and with the choroid laterally, and has much the appearance of a melane-sarcoma of the choroid. The anterior chamber is obliterated, and the lens is stained dark blue by hæmatoxylin. The tumour-mass stains irregularly in portions.

"Microscopically.—The tumour of the retina is a typical glioma. The small round cells, with but little extra-nuclear protoplasm, stain uniformly in parts of the tumour. In others they show tubules of well-staining cells, surrounding a central blood vessel, which are in turn embedded in masses of cells which have lost all staining power, and are, in places, densely infiltrated with calcareous salts. The growth is non-pigmented, and the retina is so completely destroyed that it is impossible to determine the layer from which the glioma has originated. On examination under low power, one is struck with the large number of figures, having the appearance of tiny wreaths, some closed, and others open on one side. Study of these under greater magnification shows that these figures correspond closely with the rosette-forms described in many cases of glioma, and now well-known by the writings of Flexner, Wintersteiuer, Van Duyse, Ginsberg, etc. The component cells are cylindrical in shape, and the lumen of the rosette shows a distinct lining membrane in a few places, but usually such a structure cannot be made out. These figures are especially numerous in the central half of the detached retina, and here make up a considerable portion of the growth. In the masses in the anterior segment of the eyeball, they are much fewer in number, and the ordinary tubular arrangement of closely-packed cells, with but little intercellular substance, predominates. The choroid behind the ciliary processes shows secondary deposits of the glioma cells, which stain more uniformly than those of the retinal growth, but are otherwise of the same character. Posteriorly, it is normal, except for hyperæmia of the vessels. The ciliary processes and the iris are also involved, the tumour-cells pressing forward nearly to the pupillary border. The structure of these membranes has been completely destroyed, and their

former position can be determined only by the lines of pigment cells which had not yet succumbed to the invading process. The lens is cataractous throughout, and is densely infiltrated with lime salts. The cornea shows a large number of newly-formed blood vessels in its *substantia propria*. Its epithelial covering is irregularly thickened, and the surface layers are dry and horny in appearance.

"Examination of the round pigmented mass in the subretinal space, alluded to in the microscopic description, shows that it is separated from the choroid by the pigment cell layer of the retina, and that it is an old, partly-encapsulated hæmorrhage, the corpuscular elements of which do not stain well. It contains a large quantity of blood pigment, and presents a great many triangular, needle-shaped clefts, such as are left after the removal of cholestearin plates by the solutions used in the dehydration of the tissue. Elsewhere, in the subretinal space there are smaller hæmorrhages in contact with the retina. The optic nerve is atrophic, and the blood vessels are widely distended with blood, even the small septal capillaries being increased to good-sized vessels. It is not infiltrated with glioma cells.

"*Diagnosis.*—Glioma of the retina, with secondary deposits in (and destruction of) the choroid, ciliary processes and iris; cataract, secondary glaucoma; old intraocular hæmorrhages."

At present writing (June, 1903), Dr. Moon reports a continuance of the patient's good health in every respect.

The case is of interest for several reasons:

1. The length of time which has elapsed without a recurrence; this he accounted for by the plastic and cicatricial material occluding the channels for the exit of the anterior and middle lymph stream and blood currents, with the presence of an enormous old organized blood clot in the subretinal spaces, the atrophy of the optic nerve, and the occlusion of the vascular and lymph channels in the optic nerve itself and its surrounding coats;

2. The non-involvement of the fellow-eye; this, in spite of the long period of time which has ensued since the removal of the affected organ and the increased age of the patient, must still remain *sub judice*, because it may be possible that some of the glial cells of the retina of the healthy eye may be in a condition for faulty growth and perverted action, thus giving rise to a possibility for independent disturbance.

3. The age of the patient (nine and a half years); and the presence of the nests or rosettes.

THE TREATMENT OF DACRYOCYSTITIS BY EXTIRPATION OF THE LACRYMAL SAC.

By Etienne Rollet,

CHIRURGIEN DE L'HÔTEL-DIEU; PROFESSEUR AGRÉGÉ DE L'UNIVERSITÉ DE LYON, FRANCE.

In the course of the following communication I purpose to study successively the indications for the performance of, and the results (immediate and remote) of extirpation of the lacrymal sac, as a means of treating dacryocystitis. An account of my original operations was published several years ago (*Lyon Médical*, 1896). I have now removed the sac from fifty patients.

Indications.—We must admit the existence of six clinical varieties of dacryocystitis.

In the first form: simple dacryocystitis, without ectasia, also called lacrymal blennorrhagia—extirpation of the sac is rarely needed, because probings and injections generally suffice to quell the disease. At the same time, I perform the operation in old and rebellious cases, in cases where the introduction of probes is painful or impossible, and when the patient demands a speedy cure, or where a cataract must be extracted. 2. Ablation of the sac appears to me to be the only rational operation in cases of lacrymal tumour, with mucous or purulent contents. 3. It is in phlegmonous dacryocystitis that operation is the least clearly indicated. Speaking generally, in these cases one should first open the perisaccular collection of pus, and wait until œdema has subsided. It is only late in the disease that one is able to extirpate the *sac à froid*, as in appendicitis. 4. chronic lacrymal fistulæ constitute a formal indication for ablation of the sac. 5. Tuberculous dacryocystitis (of which I have recorded four cases) is quickly cured by aseptic extirpation of the sac. 6. and there also we find a precise indication for the operation. Lastly, the prelacrymal tumour may be secondarily complicated from purulent dacryocystitis, and thus necessitate extirpation of the sac.

Method.—I remove the lacrymal sac in the following way. An incision, about 15 mm. long, but varying in accordance with the size of the tumour, is made, starting from the level of the internal palpebral ligament, and descending at first perpendicularly, and then being directed to the outer side. It thus describes a curve running parallel to that which is formed by the crest of the ascending process of the superior maxilla, which can be felt with the finger. The aponeurotic layer which covers the antero-external wall of the sac is next incised. This is followed by a dissection of the fibrous layer, thereby exposing

the anterior wall of the sac. I next free the neighbouring postero-internal portion of the periosteum, and the external wall of the sac, by means of a cutting raspatory (*rugine*

tranchante), and not by a bistoury, a point that I was the first to insist upon. The cupola of the sac is next disengaged, at the same time that the lower part of the sac is made to see-saw by dragging upon the upper part. Then, the sac is excised quickly, and abruptly, by cutting it away from its attachments at the level of the nasal duct with the raspatory. The last step is to curette the nasal duct. Jetting hæmorrhage is arrested by means of a small pair of forcipressure forceps, and oozing by tampons of wool and firm pressure. A flat dressing is applied, but neither drains nor sutures are used.

Immediate and remote results. Primary union of the wound is obtained on the fourth or fifth day, if one has taken care (I repeat the fact) to employ neither drains nor sutures. Suppuration is cured immediately the operation is performed, as well as its irritative and inflammatory accompaniments as regards the conjunctiva. I have never seen ectropion nor keloid nor adherent cicatrix follow removal of the lacrymal sac. The small and supple scar is at first reddish, but it soon becomes white, and then disappears ; it always moves freely over the bone beneath.

According to my statistics (see *Revue générale d'ophtalmologie*, January, 1903), amongst 27 patients, watched for periods ranging from six months to seven years, 89 per cent. were definitely cured. In 67 per cent. lacrymation did not exist ; in 22 per cent. it was insignificant, and made its appearance only when the patient was exposed to wind or cold in 11 per cent. it persisted. With regard to the last-named cases, however, the character of the secretion had changed since it was no longer infective but had become simple—*i.e.* painless, and merely inconvenient. It is noteworthy that lacrymation sometimes vanished immediately after the operation, and sometimes much more gradually.

How can we explain the immediate or gradual disappearance of lacrymation after an operation which, after all, removes only the excretory apparatus ? Three theories have been propounded to account for the fact, as under :—

(1) That the lacrymo-nasal canal becomes formed anew, a view that I have opposed on both clinical and experimental grounds ;

(2) That the watering of the eye disappears with the cause of the hypersecretion, namely, the lacrymal inflammation.

This theory explains the disappearance of the lacrymation often witnessed immediately after the removal of the sac, or, in other words, after suppression of the suppuration causing the lacrymal irritation ;

(3) That the operation is followed by an atrophy of the lacrymal gland. This theory explains those cases where the watering of the eye persists for some little time after ablation of the sac. An experiment performed by me in 1896 upon a dog, showed that an atrophy, macroscopical and microscopical, of the lacrymal glands followed five months after extirpation of the animal's lacrymal sac. Tscherno-Schwartz in 1901, reached the same results after experiments upon rabbits.

I conclude, then, that in the great majority of cases, a definitive cure of dacryocystitis may be obtained by systematic ablation of the lacrymal sac.

CLINICAL, PATHOLOGICAL, AND THERAPEUTICAL MEMORANDA.

NOTE ON A CASE OF VESICATION OF THE CORNEA BY POTASSIUM BICHROMATE.

By W. Ernest Thomson, M.A., M.D.,
SURGEON TO THE GLASGOW EYE INFIRMARY.

The following case is perhaps of sufficient rarity to warrant publication :

John McL., 64 years, chemical works labourer, came to the Glasgow Eye Infirmary on 8th October, 1902, stating that three days previously he had received a drop of chrome liquor in the right eye. Inasmuch as, when pressed, he was unable to give the exact date, and even suggested that possibly a crystal of potassium bichromate, and not a drop of the liquor, had got into the eye, his statements must be accepted with reserve.

Whatever the exact form of the irritant, whether crystal or liquor, it is practically certain to have been potassum bichromate, because the firm with whom he worked is largely engaged in chrome manufacture. At the time of the accident there had been some pain of a smarting character, which passed away and did not return.

Examination of the eye revealed that the lower half of the corneal surface appeared bulged forward in the form of an almost transparent bag, which could be made to change its shape on gentle pressure with the eyelid. The iris and pupil

seen through this part appeared markedly distorted. The surface took on no stain with fluorescein. There was considerable hyperæmia of the palpebral conjunctiva and the caruncel.

Profile drawing of the Cornea, made by Dr. A. J. Ballantyne.

Tension normal; vision much reduced, but not accurately noted.

He was admitted to the Infirmary as an in-patient, and kept in bed, and the further observation made that the area affected was anæsthetic, except to fairly firm pressure with a probe.

The eye was firmly bandaged, a mode of treatment which proved of no avail, as the patient could not tolerate any but light pressure.

Two days later the prominence appeared to be rather less, an opaque area had appeared along the upper part of it, and there was now present some irregularity of the surface. The lower half of the cornea, except near the limbus remained anæsthetic, the upper half acutely sensitive.

At this time some doubt was cast upon the diagnosis of blister, and a suggestion made by two of my colleagues that the condition might be one of acute ectasia, and that I might clinch the diagnosis by puncturing the prominence. Bearing in mind the history, the normal tension, the anæsthesia, and above all, the evident diminution in size of the swelling, I preferred not to take any operative steps.

Ten days after admission there was marked improvement in the curvature, the surface required very close inspection to reveal any irregularity, but the opaque edge at the upper part had increased.

On the thirteenth day the opacity was still greater, and there was yet some distortion of the pupil and increased apparent depth of the anterior chamber seen through the lower portion of the cornea, which remained clear.

The prominence became very gradually smaller, although no breach of surface, such as might allow of escape of fluid, was ever discovered, and by the twenty-seventh day the corneal surface appeared to have its normal curvature. The

opacity remained unaltered, *i.e.*, along the site of the greatest prominence, and the anæsthesia persisted. Ophthalmoscopically, the media were clear, but there was considerable irregular astigmatism. V. barely 6/36.

The patient was dismissed, and has only been seen once again, about the thirty-seventh day after admission. The anæsthesia persisted. During the whole time the patient was in hospital, the only treatment was the local use of belladonna lotion, and strict rest in bed. As above stated a pressure bandage could not be applied.

The case appears to me to be somewhat remarkable, whichever diagnosis is accepted. Taking all the facts, I cannot at present sustain any other than that of vesication.

A SIMPLE DEVICE FOR THE TREATMENT OF SPASMODIC ENTROPION.

By Leslie Buchanan, M.D.
SURGEON TO THE GLASGOW EYE INFIRMARY.

That form of spasmodic entropion of the lower eyelid, which is not uncommonly seen in persons who have lax eyelids as a complication of inflammatory affections of the conjunctiva and cornea, is frequently a source of considerable trouble and annoyance to the surgeon.

The ciliary margin rolls in, and the eyelashes impinge upon the cornea, and set up or keep up a great amount of irritation. The various simple methods of treatment, such as collodion applied to the cheek, strips of adhesive plaster, etc., usually fail to produce the desired result, so that many surgeons excise an elliptical piece of skin as a last resource.

For several years now I have employed the following simple device in the treatment of the condition, and have had such uniform satisfaction with the result, that I venture to hope it may be of service to others.

A needle, half curved, and about 3 cm. in length, bearing a suture of silk, double, and about eight inches in length, is inserted under the skin of the lower eyelid, at a point about 5 mm. from the ciliary margin, and at the junction of the external and middle thirds of the lid.

It is carried along under the skin parallel to the lid margin, and brought out at the junction of the middle and inner thirds. From this point of counter-juncture the suture is drawn out for half its length. The needle is then re-inserted at a point 3 or 4 mm. below the counter-puncture, carried along under the skin again to a point 3 or 4 mm. below the first puncture, and the thread drawn tight.

The two ends of the thread are then, being 3 mm. apart, crossed, drawn quite tight, tied and cut off short.

The immediate result is eversion of the eyelid, but this condition soon passes away. As a result of the irritation of the suture, a mass of inflammatory tissue is formed under the skin, having a direction perpendicular to the lid margin. It is this which produces the beneficial effect, for the cicatricial mass acts as a splint and keeps the lid rigid. The longer the stitch is left in, as a rule, the greater the amount of re-action. I usually find that a week or ten days is as long as is necessary in any case, and that the bridge of fibro-plastic tissue formed endures for a week or two after the stitch is removed. Complete absorption of the mass is invariable, and no permanent deformity results.

I find that so long as the ordinary antiseptic measures are taken, there is no risk of suppuration, and employ the method of treatment at the out-door department without hesitation. This method has the advantages, over the excision of a piece of skin, that it is almost painless and requires no anæsthetic, and that it occupies much less time.

CURRENT LITERATURE.

NOTE.—Communications of which the titles only are given either contain nothing new or else do not lend themselves to abstract.

I.—ANATOMY, PHYSIOLOGY, PATHOLOGY, AND BACTERIOLOGY.

Pusey, Brown.—Retinal rosette formations of neuroglia in inflammatory processes. *Archives of Ophthalmology*, July, 1903.

Pusey discusses the rosette formations found in glioma and in microphthalmic eyes and quite recently by Murakami (*Arch. f. Ophthal., LIII., p.* 439, 1902) in pure inflammatory processes. Pusey has found rosettes in an eye removed on account of an acute kerato-irido-cyclitis. The histological examination of this eye is given at some length. The rosettes present clearly resulted from infoldings of the retina, probably caused by shrinkage of the bands that existed in the vitreous. The rosette formations were unusually distinct in this case owing to disappearance of the nervous tissues proper and the persistence of neuroglia tissue. On looking over his collection of pathological sections, Pusey found distinct rosettes in

several. The conclusion of the writer is that rosettes have one and the same origin whether they occur in gliomata, in microphthalmic eyes, or in inflammatory processes, since in every case their lining wall is formed by the external limiting membrane of the retina. Finally, Pusey raises the interesting question whether retinal tumours with rosette formations are less malignant than those devoid of such structures. The question, however, can at present be a matter only for speculative interest, and anyhow does not affect the treatment of these growths.

(1) **Raehlmann.—On ultramicroscopic investigation of colouring matters and its physiological significance.** *Ophth. Klinik*,, August 20th, 1903.

(2) **Ibidem.—A further communication relating to ultramicroscopic investigation of combinations of colouring matter and their physical and physiological significance.** *Ophth. Klinik.*, October 5th, 1903.

Raehlmann used a new microscope introduced by Siedentopf-Zsigmondiz of Jena, which by means of a brilliant focal, lateral illumination render visible the smallest particles (5μ—10μ) in their natural colour. With this instrument he examined solutions of colouring matter, such as Prussian blue, carmine, ultramarine, naphthol yellow, and so forth. The resolution of each of the colouring matters into its component colours yields an unsuspected insight into the physical and physiological nature of colour, and is of importance as regards our conception of the mixing of colour. The smallest particles of a pure colouring matter are not only characterised by their colour but probably also by distinctive form and movements. It therefore follows that colouring matters may be analysed by this method. The composite colours examined showed their smallest component particles either lying alongside each other (physiological mixture of colours) or were seen to consist of particles differing in shape, movement, and colour from those of the components. This condition has been proved by more recent researches—for example, on a mixture of Prussian blue and naphthol yellow—to rise from the fact that the particles of one component cluster around those of another, forming, as it were, a kind of sheath. This covering, according to Raehlmann, is formed by electro-magnetic action, minute negatively charged particles collecting around those positively charged, or *vice versâ*. These composite particles may be again separated by the action of electro-magnetism.

A. Birch-Hirschfeld.

Brar, Aaron.—Two central Retinal Arteries. *American Medicine*, August 29, 1903.

Whilst examining the fundus of a lad, who was suffering from ametropic headaches, Brar found the following anomaly: two central retinal arteries in each optic disc, one emerging from the upper and the other from the lower half of the papilla.

Valenti, G.—Experimental researches upon the hæmolytic power of the vitreous and aqueous humour. (Ricerche sperimentali sul potere emolitico dell'umor vitreo e dell 'umor acquoe.) *Archivio di Ottalmologia*, 1903, V. 10, Fas. 11 and 12, p. 407.

Valenti reaches the following conclusions:—

1. The aqueous humour of animals whose serum is hæmolytic for certain determined heterogenous erythrocytes shows a very limited hæmolytic power. In that respect the vitreous is somewhat more active, although it is always much less powerful than blood serum.

2. The aqueous and the vitreous humour of animals treated with heterogenous blood in respect of which serum should be hæmolytic, acquire hæmolytic properties greater than normal, but always inferior to those of blood serum. The aqueous and the vitreous of dogs inoculated with the serum of rabbits treated several times with the blood of dogs, always acts in this way.

3. The injection of irritant substances under the skin of the temple or beneath the conjunctiva of dogs and rabbits, and even injections into the anterior chamber, determines no changes in the hæmolytic action of the intra-ocular fluids. Mechanical irritation of the iris, paracentesis, tearing of the iris, iridectomy, and extirpation of the superior cervical ganglion sets up no modifications..

4. The injection of substances chemiotaxic as regards leucocytes provokes a sensible augmentation in the hæmolytic power of the vitreous, while the power of the aqueous humour remains unchanged.

5. It is therefore extremely difficult to modify the liquids of the eye in such a way as to augment their cytolithic power and their resistance against microbic or other invasions.

A. Antonelli.

Morton, H. Mc I.—A simple and convenient method for the mounting of macroscopic specimens. *Ophthalmic Record*, January, 1903.

Morton describes Greeff's simple plan of mounting eyeballs, the essential details of which are as follows: after hardening

the eyeball for two to four days in 10 per cent. formalin, cut it in the desired direction, wash in distilled water for ten minutes, and dry the specimen with a cloth. Fasten the eye to the back of the oblong glass jar used in the process with gelatine (gelatine heated with water for a few hours), allow the gelatine some minutes to dry, and then fill the jar with 10 per cent. formalin. Fasten the top of the glass cell down with gutta-percha cement, and cover the cement with paint. Finally, label the specimen.

Silberschmidt, W.—Bacillus subtilis as a cause of panophthalmitis in man. (Le bacillus subtilis comme cause de la panophtalmie chez l'homme.) *Annales de l'Institut Pasteur*, 25 avril, 1903, p. 268.

In Switzerland a husbandman or a vine-dresser working in the fields, whilst digging vigorously, suddenly experiences a pain at the moment a foreign body, usually a fragment of metal and more rarely a morsel of stone, penetrates into his eye. Twenty-four hours afterwards panophthalmitis declares itself, and the eye is lost. The disease is therefore a very serious inflammatory condition of the eyeball, running an extremely rapid course.

Silberschmidt has examined bacteriologically the vitreous humour in two eyeballs removed on account of severe traumatic panophthalmitis. In the first case the eye had been wounded whilst the patient was working in the fields, and the second eye had had a morsel of steel taken from its interior by Haab's giant magnet. From both these cases Silberschmidt isolated a pure culture of an organism belonging to the bacillus subtilis group. The bacillus, when injected into the vitreous of rabbits and dogs, set up panophthalmitis, the first symptoms of which were observed six to eight hours after inoculation. Poplawska, it appears, found a similar micro-organism in six cases of panophthalmitis, and Haab found it once. In a post-operative case of panophthalmitis, Roemer came across bacilli resembling B. subtilis, but no cultures were made. Kayser found the same organism, once pure and once associated with staphylococcus pyogenes aureus and albus, in two cases of traumatic panophthalmitis. Silberschmidt produced panophthalmitis by inoculating the vitreous with an emulsion of earth, and from two cases of the kind obtained B. subtilis in culture. These various facts and experiments lead Silberschmidt to conclude that the several representatives of the B. subtilis group of organisms may occasion panophthalmitis in man, on the condition that they are introduced into the vitreous body. As the bacilli come from the soil, the special danger that belongs to wounds received during the

course of agricultural work is explained. The author admits that organisms other than the B. subtilis may cause panophthalmitis. Indeed, he quotes Sattler as having found bacillus pyocyaneus, and Perles bacilli "of the size of B. typhosus" in such cases. Moreover, in a certain number of other cases diplococci and pseudo-diphtheritic bacilli have been demonstrated.

Flatau, G.—A contribution to the etiological study of panophthalmitis. (Beitrag zur Aetiologie der Panophtalmie.) *Zeit. f. Augenheilk.*, Marz, 1903.

The study made by Flatau of three cases of panophthalmitis from a bacteriological point of view confirms the important and serious part played by the pneumococcus in the etiology of infected wounds of the eye. Flatau notices the fact that cultures of the pneumococcus are obtained with great difficulty, inasmuch as the microbe appears to have lost in the ocular media some of its capacity to grow. This observation may explain many negative results.

Revue générale d'ophtalmologie, octobre, 1903.

Meyer, Paul.—Ophthalmological considerations with regard to the intravenous injection of Collargol into rabbits. (Ophthalmologische Betrachtungen im Anschluss an intravenöse Kollargol-Einspritzungen bei Kaninchen.) *Centralblatt f. prak. Augenheilkunde*, Juli, 1903.

Meyer has made some interesting and suggestive experiments on rabbits for the purpose of determining what influence, if any, the intravenous injection of Credé's collargol has upon the course of an inoculation panophthalmitis. Three rabbits were selected, A, B, and C. The vitreous of A and B was inoculated with a bouillon emulsion of a pure culture of the hay bacillus (B. subtilis). 1 c.cm. of a 5% collargol solution was injected into the veins of the rabbit B. From the second day onwards, A and B had 1 c.cm. to 2 c.cm. of collargol injected daily. In the course of twenty-four hours, symptoms of typical panophthalmitis appeared in both A and B, but the symptoms were less severe in B than in A. The inflammation in both instances receded very quickly, and the animals remained in good health. On the fourth day after the last collargol injection had been made, the affected eyes were enucleated, and examined bacteriologically. A pure culture of the B. subtilis was obtained from the vitreous humour, which was opaque, of greyish colour, shrunken, and more or less organised. The vitreous of rabbit C was inoculated with B. subtilis, but collargol was not used. A violent panophthalmitis was the result. This led to softening of the eyeball, and

the animal succumbed. The eye was removed eighteen days after inoculation. A pure culture of the B. subtilis was got from the vitreous humour. The vitreous was of an opaque yellow hue, and liquified in parts.

As the outcome of the experiments outlined above, Meyer is not prepared to make any extravagant claims as to the practical value of collargol injections in panophthalmitis. It is, nevertheless, possible that a panophthalmitis caused by micro-organisms less resistent than the hay bacillus may be hindered or even stopped in its course by early treatment. In any event, the experiments open out an interesting field for observation. Meyer hints that affections such as ulcus serpens and sympathetic ophthalmitis may be benefited by injections of collargol.

De Schweinitz, G. E., and Shumway, E. A.—On the histology of Bullous Keratitis in glaucomatous Eyes. *Archives of Ophthalmology*, May, 1903.

De Schweinitz and Shumway relate two cases of glaucoma, one primary and the other secondary, associated with the formation of bullæ on the cornea, where the affected eyes were enucleated and submitted to microscopical examination. The bullæ were found to be formed within the anterior epithelium of the cornea. The basal cells of that layer showed changes, in that they were polygonal and not cylindrical in shape. In one of the cases a homogeneous layer of tissue, 7 μ. to 9 μ. in thickness, originating from pannus tissue at the limbus, ran in arcades through the epithelium, but it took no part in the formation of the walls of the central bulla that was present. It is pointed out that the fluid contained in the bulla may come from (*a*) a stasis of the lymph circulation, (*b*) increased transudation of the capillaries of the corneal limbus, or (*c*) the fluid of the anterior chamber. The fluid which cannot be drained away because of the obstruction of the lymph channels, forces its way through the widened nerve canals in Bowman's membrane, or (as Brügger believed) through parts of the membrane weakened by absorption, produces an inter-epithelial œdema which causes the cells to degenerate and to loosen their hold on Bowman's membrane, and raises the epithelium in the form of bullæ.

Pusey, Brown.—Cytotoxins and sympathetic Ophthalmia. *Archives of Ophthalmology*, July, 1903.

Basing his theory upon recent experimental work with regard to the production of heterotoxins, isotoxines, and allied bodies, Pusey suggests that when a damaged eye degenerates in the orbit, the cells of the organ can give rise to

a specific cytotoxin. The latter, circulating in the blood, picks out, so to speak, the cells of the fellow eye, and thereby produces those changes collectively known as sympathetic ophthalmitis. In the hope of obtaining a heterogeneous toxic serum, the author made a somewhat complicated experiment, into the details of which we need not enter, since its results were negative.

Gourfein.—The diagnosis of Tuberculosis of the Iris, by puncture of the anterior chamber and its treatment. (Du diagnostic de la Tuberculose de l'iris par la ponction de la chambre antérieure et son traitement). *Rev. Méd. de la Suisse romande*, 20th avril, 1903.

Gourfein comments upon the many difficulties which attend the clinical diagnosis of tubercle of the iris. He then examines, turn by turn, the different methods of diagnosis placed at our disposal by the laboratory. The anatomical plan, he thinks, has lost much of its value since the diagnostic importance of the giant-cell has been doubted. Inoculation is a certain test, but it is often dangerous to adopt, inasmuch as an iridectomy must be performed, no easy thing in these cases. The finding of the specific bacillus in the affected tissues is proof positive, but a failure to do so does not invalidate the diagnosis. Lastly, tuberculine may be injected, but this means is perhaps less certain and even more dangerous than the ones enumerated above. Under these circumstances, it has occurred to Gourfein to utilise the aqueous humour for the diagnosis of tuberculous iritis. Its virulence is determined —first, by inoculation of rabbits, and, secondly, by the production of cultures when the liquid is implanted on potato media. This plan has been successfully adopted in two cases, into the details of which the author enters at some length. All the animals whose anterior chamber had been inoculated with the suspected aqueous humour, collected by paracentesis, manifested later a granulous iritis, in which the specific bacilli were found. It must be remembered, however, that the appearance of the iritis may be delayed for two months or more.

Gourfein does not believe that the treatment of tuberculous iritis can in any sense be medical. Accordingly, he has recourse to surgical means. He quotes certain results obtained by the tuberculine T. R. of Koch, as tending to show that no single case, proved by inoculation to be one of tuberculosis of the iris, was cured. He is of opinion that provided the patient is young, and the ocular tuberculosis primary, immediate enucleation should be practised. Experience has shown him

that of the animals inoculated only those escaped the generalisation of the virus whose eyeballs were removed. At the same time, we may point out that the conditions as regards tuberculous iritis in rabbits and in human beings are scarcely comparable. In the former the disease is experimental and primary, so that prompt removal of the affected eyeball would almost certainly prevent generalisation. In the latter, however, it is questionable whether tubercle of the iris is ever primary—that is to say, it represents a generalisation of the tubercle bacilli. Gourfein's recommendations with regard to treatment are, from this point of view, somewhat weakened.

Reimar, M.—The ophthalmoscopic appearance of the Ora Serrata and the Ciliary processes. *Archives of Ophthalmology*, March, 1903.

Reimar has examined the region of the ora serrata in eyes from which cataract had been removed by the so-called combined operation. He describes the ophthalmoscopic appearances of this part of the eye. The periphery of the fundus is characterised by a diminution of the pigmentation, so as to appear pale-red, while the choroidal vessels are few in number and meridional in course. The ora serrata is represented by a pigmented band forming regular arcades of pigment extending forwards. The orbicularis ciliaris manifests itself as a pale-red area showing numerous fine, irregular, yellowish-white stripes, and choroidal vessels running in a meridional direction. The ciliary processes are seen under the guise of peculiar forked processes of pigment. The root of the iris may be recognised as a dark shadow. Reimar, like Magnus (*Archiv. f. Ophth.*, XXXV., 3, 1, 1889), has often found pigmentary and atrophic changes in the periphery of the fundus, above all in cases of high myopia.

Wicherkiewicz, B.—On a Mycotic Affection of the Cornea. *Archives of Ophthalmology*, January, 1903.

A woman, aged 23 years, was struck in the eye by a piece of dirt whilst engaged in digging potatoes. Three weeks later there was a red ring around the limbus, the eye was somewhat congested, and the cornea was covered by a tough, circular, homogeneous mass, of yellowish-white colour. The mass had a diameter equal to half that of the cornea, an irregular outline, and an elevated and uneven surface. Hypopyon was present. No affection of the tear-passages. T.n. V. = p.l. Twelve days later the superficial layers of the circular mass were shaved off with a Graefe's knife. The patient was lost sight of soon afterwards. The mass removed by operation was

found to contain a fungus belonging to the penicillium glaucum variety. The author concludes his paper with a reference to cases of mycosis published by Leber, Uhthoff, and Fuchs.

Harman, N. Bishop.—A minimal form of Fissura Facialis. *Trans. Ophthalmological Society*, Vol. XXIII, 1903.

Harman describes two cases where a tiny opening existed on either side of the bridge of the nose just below the inner canthus. These he regards as representing a minimal form of the facial fissure, *i.e.*, a small deficiency in the union of the lateral, nasal, and maxillary processes, which, with the fronto-nasal process, go to form the face.

II.—DISEASES AND INJURIES OF THE EYE AND ORBIT.

Caspar.—Lattice-like marking on the Cornea after injury to the Eye. (Gitterförmige Hornhauttrübung nach Augenverletzungen.) *Klin. Monatsbl. f. Augenheilkunde*, October 13, 1903.

Caspar draws attention to a particular opacity of the cornea following a trauma. Although this condition is not uncommon, yet it has hitherto escaped description. He has been enabled to follow three cases in detail. The lattice-like appearance did not make its appearance for at least a week after the injury. It was not connected with the injured spot, but was usually situated in the centre of the cornea. The stripes lay immediately below the epithelium. The surface of the cornea was slightly raised by tiny, knob-like swellings, and the latter were the only parts that stained with fluoresceïn. The stripes eventually disappeared without leaving cicatrices. Caspar assumes the cause of the appearances to lie in a flattening and distortion of the cornea, giving rise to the formation of longitudinal grooves.

A. Birch-Hirschfeld.

Hillemanns.—On injuries to and protection of the Eye in the iron and steel industries. (Ueber Augenverletzungen u. Augenschutz in der Eisen u. Stahlindustrie.) *Klin. Monatsbl. f. Augenheilk.*, October 13, 1903.

Hillemanns gives a clear and detailed account of the various kinds of protective spectacles which he thinks necessary in and suitable for different callings. He especially recommends the use of wire gauze spectacles, with or without glass, in the iron and steel trades. He lays stress on the fact, however, that no single kind of protective appliance is suitable for all

purposes. This leads him to recommend that different kinds of patterns should be laid before the workmen for their choice.

A. Birch-Hirschfeld.

Asmus.—Some observations upon cases of acute Sclero-keratitis Rheumatica. (Beobachtungen über akute Fälle von Sklerokeratitis Rheumatica.) *Klin. Monatsbl. f. Augenheilkunde*, September 25, 1903.

Asmus has observed thirteen cases of acute rheumatic sclero-keratitis, which were characterised by groups of deep-seated corneal infiltrations near the limbus, pericorneal injection, and frequent spread to the iris. In every case sodium salicylate effected cure within a short time.

A. Birch-Hirschfeld.

Werner, L.—A case of Intra-Ocular Echinococcus Cyst with brood capsules. *Trans. Ophthalmological Society*, vol. XXIII, 1903.

Seven months before he came under Werner's notice, a farm labourer, aged 28 years, found that he could not see the upper half of any object with his left eye, the sight of which then gradually failed altogether. When examined, there was a degree of ciliary redness, a slight staphyloma of the anterior part of the eye, and a crescentic blue line in the ciliary region resembling a sub-conjunctival rupture of the sclera. The iris was atrophic and adherent in its outer half to the lens. A greyish-white, fluffy opacity was deeply situated in the pupillary area, presumably in the crystalline lens. No red reflex from fundus: V. = no perception of light. The condition suggested the existence of an intra-ocular tumour, and this led Werner to remove the eye. Upon opening the globe, a cyst was found, extending from the lens in front to the optic nerve behind. Its delicate wall was closely applied to the retina. A number of spherical, opaque, white bodies, none exceeding a pin's head in size (subsequently found to be brood capsules) occupied the inner surface of the lower half of the cyst. Microscopically, it was seen that the cyst was subretinal, and not situated in the vitreous, as at first thought. The cyst, which was a typical echinococcus, consisted of two layers, an outer, thick and elastic, and an inner, delicate, and composed of a finely granular substance, containing many nuclei. In some of the brood capsules, as many as fifteen echinoccoccus heads, or scolices, could be counted.

Werner remarks that although many cases of echinococcus in the orbit have been reported, and cases of intra-ocular cysticercus are not very rare, yet the literature contains two

cases only which are described as intra-ocular hydatids, namely, those by Hill Griffith (*Trans. Ophthal. Society*, Vol. XVII, p. 220), and Gescheidt (*Zeits. f. die Ophth.*, Bd. III., p. 437).

Oppenheimer, E.—Nævus pigmentosus of the conjunctiva and cornea. *Deutsche Med. Woch.*, 1903, No. 7, p. 143.

Oppenheimer found in an old man a melanoma of the conjunctiva. The growth had been present since birth, and was not increasing in size. The black mass was soft and lobulated, one mm. in thickness, and occupied two-thirds of the cornea.

Morton, A. Stanford, and Parsons, J. Herbert.—Hyaline bodies (Drusenbildungen) at the Optic Disc. *Trans. Ophthalmological Society*, Vol. XXIII, 1903.

Morton gives brief notes of the two following cases of hyaline bodies at the optic disc. (1) A male, 24 years, complained of night-blindness. R.V.= $\frac{3}{60}$; L.V.= $\frac{6}{24}$. He was found to suffer form retinitis pigmentosa with hyaline bodies at each optic disc. His parents were cousins. One sister had retinitis pigmentosa, and one uncle night-blindness. (2) A female, aged about 20 years, complained of difficulty in near-work. No retinitis pigmentosa or night-blindness, but distinct pallor of discs with hyaline bodies at each papilla. Her parents were second cousins.

Parsons then takes up the subject of hyaline bodies, which he discusses from various points of view. The condition, a rare one, usually begins in early life, and runs an extremely chronic course. Sex is probably of no ætiological importance. As a rule, both eyes are affected, although often to an unequal degree. The optic disc, in such cases, is seen to be swollen to 12 D. or 14 D., so that the first impression usually is that the case is one of optic neuritis. The swelling is due to masses of small, translucent nodules, which generally surround the vessels at their exit from the disc. Now and then they are situated at the edges of the disc, which they obscure. They may invade the neighbouring retina for a short distance. In many of the cases there has been a coincident retinitis pigmentosa, or small deposits of pigment in the peripheral parts of the fundus. Diminution of light—and colour—sense, with contraction of the fields, is a feature in many of the cases, and Parsons surmises that some of these are probably instances of the unpigmented type of retinitis pigmentosa. Injuries appear to bear a relationship to the hyaline condition, although exactly of what kind it is difficult to determine. In some of the cases there have been various nervous disorders, a remark that applies also to nephritis. But when all is said and done, hyaline bodies are often met with in patients who

show no affection either of the eyes or of the general health. Prognosis may be considered as good.

Various pathological views have been held with regard to the nature of these *Drusen*, as, for example, that they are colloid, myelin, or hyalin bodies, or that they are calculous nodules or *Kalkmetastase* (Wedl and Bock). These and other views are examined by Parsons, who absolutely rejects the theory that they are of colloid nature, and concludes that they consist of hyaline—that is, an albuminous exudation undergoing gradual chemical changes, and capable of being calcified or ossified.

Jellinck, S.—Injuries from Lightning. *Wiener Klin. Wochenschrift*, 1903, No. 6.

Jellinck's observations are based upon the study of three cases. The first was a peasant who was severely injured and who complained of seeing sparks before his eyes, even when shut, accompanied by pain, and immediately afterward the room would seem as though enveloped in a fog or cloud. Externally there was nothing to be seen. The second patient showed the following symptoms:—In one eye there was a subconjunctival hæmorrhage. The lower half of the cornea of this eye was very cloudy, and closer inspection showed that there were a number of fine, deeper, opaque spots, which were also situated in the cloudy area. Ciliary injection was present. There was also sluggishness of the pupil. The patient complained of a contracted feeling in the eyeball. He recovered entirely. The third was a girl, and after the stroke she was delirious for forty-eight hours. There was left-sided ptosis, and narrowing of the left pupil, which acted, even reflexly, very sluggishly. Accommodative re-action was present. When the patient was seen eight days later these symptoms had disappeared, although she still complained of some irritative symptoms in that eye. Externally there was nothing to be seen.

Annals of Ophthalmology, April, 1903, p. 251.

Topolanski.—Lightning stroke and ocular hæmorrhages (Blitzschläge and Augenblutung). *Wiener Klin. Rundschau*, 1903, No. 22.

In a patient who had been struck by lightning, Topolanski found blood in the anterior chamber of one eye and hæmorrhage into the vitreous of the other. The former was quickly absorbed, but the latter took considerably longer. The hæmorrhage without doubt resulted from the lightning. In a second patient, there was a conjunctival ecchymosis in the right eye together with hyphæma, whereas in the left eye

there was a lacerated wound at the outer canthus. It was eventually found that the lacerated wound did not originate from the lightning. The lightning had struck a tree, a branch from which had injured the patient's eye. A piece of wood, 3 cm. long, was found embedded in the skin of the forehead, and the wound at the canthus was discoloured by the bark.

Centralbl. f. prak. Angenheilkunde, August, 1903.

Collins, E. Treacher.—Partial atrophy of the Optic Nerves, caused by lightning. *Trans. Ophthalmological Society*, Vol. XXIII, 1903.

A man, 49 years of age, noticed a mist before his eyes the day after he had been struck and dazed by lightning. Collins found V. equal to counting fingers at two feet, atrophy of the outer half of each optic disc, and great contraction of the field of vision for white. Neither green nor red could be distinguished. There was also facial paresis and nerve-deafness on the right side. The knee-jerks were slightly exaggerated. No history of syphilis, and no abuse of tobacco. Collins concludes that the failure of sight and the atrophic discs in this case are due to lightning. He points out that lightning may produce its effects in several ways: (1) by the effect of the heat rays; (2) by the effect of the chemical rays; and (3) by the effect of electrolytic action or concussion.

Stood, W.—On recurrent formation of Vesicles on the Cornea and Keratalgias after injuries of the surface of the Cornea. *Archives of Ophthalmology*, January, 1903.

Stood discusses that class of case described first by Arlt under the name *Erosio Corneæ*—that is to say, where some time after a superficial injury to the cornea, the patient experiences pain, photophobia, and lacrymation, with or without the formation of a clear vesicle or vesicles over the injured spot. The symptoms are invariably most marked on awaking from sleep. The epithelial changes tend to disappear in the course of a few hours. Various views have been held with regard to the pathogenesis of the condition. One of the most popular affirms that there exists a traumatic neuritis of the nerve-endings with consecutive trophic disturbances in the cornea. Stood himself seeks the explanation in a changed relationship between the corneal epithelium and Bowman's membrane. The deepest layer of the epithelium normally adheres to Bowman's membrane by means of little processes (Rollett, Lott, and Langerhans). He assumes that the original injury not only strips off the epithelium but also crushes the anterior parts of Bowman's membrane. New epithelial cells pushing in from the margin of the epithelial defect find an

altered base, to which their adhesion is less strong. The newly-formed epithelium rests simply upon Bowman's membrane, and at night it becomes attached to the lid, and is loosened and its nerve-endings injured when the latter is opened. Then there follows a passage of liquid from the parenchyma of the cornea through the nerve-canals in Bowman's membrane, so that a vesicle is formed. As to treatment of the condition, Stood removes the walls of large vesicles, and applies an antiseptic dressing. He recommends 1 per cent. yellow ointment or boric acid in lanoline to be rubbed into the eye at bedtime. Special care must be taken to open the lids very gradually and gently after sleep.

Weill and Gallavardin.—Acute Optic Neuromyelitis. *Lyon Méd.*, August 9, 1903.

Weill and Gallavardin record a case of acute diffuse myelitis with double optic neuritis. Their patient, a child 14 years of age, first suffered from paralysis of the right leg. Eight days later the left leg became paralysed, and three weeks after the onset of the illness incontinence of urine and fæces and a sacral bedsore appeared. The paraplegia was complete, and there was in addition absolute anæsthesia—tactile, painful, and thermic—which extended above the level of the umbilicus. The cutaneous and deep reflexes were abolished. Bilateral amaurosis, which became total in a few days, came on about six weeks after the onset of the illness. The ophthalmoscope showed it to be due to active optic neuritis without hæmorrhage or retinal exudation. The vision improved a little before death, which resulted from broncho-pneumonia. At the necropsy the spinal cord was found to be flattened, yellow, and anæmic in the lower dorsal and lumbar regions. Examined microscopically the cord was seen to be infiltrated with round cells; the cells of the anterior horns showed various degrees of chromatolysis or complete atrophy, and in places cavities were found containing softened débris of nerve fibres. Sections of the brain showed an abundant infiltration of round cells, more marked in the white than in the grey matter. The optic nerve and also the sciatic nerves were also infiltrated with small granular cells which interrupted the nerve fibres. The involvement of the white matter of the brain has not been recorded before, and in the only other case in which the brain was examined histologically, Dreschfeld found no cerebral lesion. The explanation of the occurrence of optic neuritis together with acute myelitis is not easy. The etiology of the case recorded above was unknown. It seems reasonable to suppose that in acute inflammatory lesion, attacking the nervous system, just as in chronic nervous

diseases like locomotor ataxia the spinal cord and the optic nerves are especially the seats of election.

British Medical Journal, Sept. 12, 1903.

Clarke, Ernest.—Blood in the anterior chamber, with staining of the Cornea, simulating dislocation forward of the lens. *Trans. Ophthalmological Society*, Vol. XXIII, 1903.

A lad, aged 17 years, was blinded by a kick in his right eye six weeks before he fell under Clarke's notice. Upon examination, V. = no p.l. ; tension slightly raised ; no pain ; anterior chamber full of blood, except towards the centre, where there was a circular area, of brownish-yellow colour. This central patch, which measured 6 mm. across, presented a remarkable resemblance to a small lens dislocated into the anterior chamber, and lying against the posterior surface of the cornea. During the period the patient has remained under observation, the central corneal area has diminished in size, and fresh hæmorrhages have occurred into the anterior chamber.

Baum, Wm. L.—Toxic Amblyopia from oil of wintergreen. *Ophthalmic Record*, January, 1903.

A salesman, 28 years of age, was affected with gonorrhœal arthritis, for the relief of which twenty drop doses of oil of wintergreen were prescribed every two hours. After taking the medicine for two days, the patient complained of headache, tinnitus, dizziness, yellow vision, and of inability to see well. The oil was discontinued, and the colour perception became normal about the fifth day. The patient had taken altogether about 24 c.c. of the oil in forty-eight hours. The clinical details of Baum's case are unfortunately meagre.

Wing, P. B.—Report of a case of toxic amblyopia from coffee. *Annals of Ophthalmology*, April, 1903.

The sight of a lad, eight years of age, had been failing for about six months before the patient was seen by Wing. Optic discs "much congested, retinal veins large and arteries small, vision $\frac{20}{200}$, and visual fields concentrically contracted to within 20° from the fixation point." The existence of a colour-scotoma is not noted. No history of tobacco smoking, but the lad drank six to eight cups of strong coffee daily. The coffee was interdicted, and strychnine given internally. Five weeks later, vision was $\frac{20}{15}$, and the field of vision was considerably larger. It is impossible to help suspecting, on reading the notes of Wing's case, that the patient was affected with *amblyopia nervosa*.

Luniewski, E.—Two cases of traumatic enophthalmos. (Dwa przpadki wglobiensa galki ocznej pochodzenia urazowego.) *Postep Okulistyczny*, No. 2, 1903.

Luniewski has observed at the Kolomyja Hospital two cases of traumatic enophthalmos. In the first a blow from an umbrella, and in the second a kick from a horse had caused the lesion in question. The author distinguishes between enophthalmos complicated with fracture of the bony walls of the orbit and one not so complicated. He admits two possible ways in which the lesion may be caused: 1st, the traumatism may drive in the globe mechanically by direct action; 2nd, it may bring about enophthalmos through the intermediation of innervation, indirectly. Enlargement of the orbital cavity is possible only in cases complicated with fracture, or when the contents of the orbit have become shrunken, as, for example, by the contraction of cicatricial tissue. In cases of indirect causation one must admit the existence of small intravaginal hæmorrhages of the nerves situated in the orbital cavity, with partial destruction of the nervous filaments. Maklakoff even presumes the rupture of the ophthalmic artery, an hypothesis that, according to the author, is not applicable to every case. It is known that division of the cervical portion of the sympathetic determines, among other symptoms, enophthalmos and slight ptosis. A certain narrowing of the palpebral fissure, due to the drooping of the upper lid, existed in the author's two cases, and this is suggestive of a sympathetic lesion. In the first case, where immediately after the injury there was a protrusion of the eye which was replaced by enophthalmos only at the end of several weeks, the author supposes a hæmorrhage with consecutive retraction of the retrobulbar tissues. In the second observation he supposes that there was compression or even rupture of the sympathetic fibres and of other nerves, for example: the oculo-motor, since he found along with the other symptoms dilatation of the pupil and weakening of the accommodation.

K. W. Majewski.

Neese, E.—Œdema of the lids in tertiary syphilis. (Oedem der Lider bei tertiärer Syphilis.) *Klin. Monatsbl. f. Augenheilkunde*, 1903.

Neese describes bilateral œdema of the eyelids in a case of tertiary syphilis. In the case of one eye this was caused by a gumma of the cellular tissue of the lower lid. In the other eye it resulted from a gumma lying in the depths of the orbit, obstructing the veins carrying away blood from the eyelids.

Barrett, James W. and Orr, W. F.—Vascular remains in Corneal disease. *Intercolonial Medical Journal of Australasia*, Aug. 20, 1903.

Barrett and Orr publish details and pictures of fourteen cases where fine vessels, superficial or deep, were present in the cornea. The communication ends with the following statement: "It seems to us that the physician who deals with a case of an adult, and is suspicious of the existence of hereditary sypnilis, should, as a matter of routine, examine the cornea with a +12 or +20 lens. The physician who does not do so fails to use an effective diagnostic method."

Lauder, Edward.—Paralysis of the external recti muscles appearing after a blow on the skull. *Ophthalmic Record*, May, 1903.

Lauder reports three cases where paralysis of the external recti muscles appeared at once or some time after an injury to the skull. Such cases, he points out, are not very rare. The VI. nerve is the one most frequently involved, but other cranial nerves, particularly the V., VII., and VIII., may be affected. Paralysis of the VI. nerve may exist without coma or the usual symptoms of fracture of the base of the skull. Primary paralysis (the prognosis of which is unfavourable) is due to direct injury of the nerve by the fractured bone, while secondary paralysis (the prognosis of which is better) is due to compression of the nerve by hæmorrhage, inflammatory exudation, or the formation of callus.

Bruner, William Evans.—Sarcoma of the Choroid in a Child. *Ophthalmic Record*, July, 1903.

A child, aged about six years, suffered from a sarcoma of the choroid which had invaded the orbit and produced marked proptosis. As the pupil was filled with lymph, the case had been mistaken for an inflammatory condition. Bruner exenterated the orbit. Eighteen days later a small secondary growth was discovered on the frontal bone, and later another growth developed on the jaw. The child died just four months after the operation. The author comments upon the rarity of sarcoma in young children.

Lodato, G.—Blepharochalasis. (Blefarocalasi.) *Archivo di Ottalmologia*, 1903, vol. II, fas. 1-2, p. 42-82.

Lodato contributes a clinical and pathological study of the rare affection of the eyelids called by Fuchs "blepharochalasis." This essentially consists in an alteration of the skin of the upper eyelids. The skin is very thin, devoid of all elasticity, somewhat red and flabby, more or less pendulous

and folded, and cannot be raised with the eyelid, so that in this latter respect the condition resembles ptosis. Lodato passes in review the cases published by Fuchs, Businelli, Fehr, Coppez, Pick, Dalein, Schmidt-Rimpler, and Rohmer. The author insists upon the existence of nervous changes provoking an alteration in the walls of the vessels, so that the last in their turn become the cause of trophic disturbance in the skin. A. ANTONELLI.

Hirschberg, J.—A case of Barlow's disease. (Ein Fall von Barlow'scher Krankheit.) *Centralbl. f. prak. Augenheilkunde*, Juli, 1903.

Hirschberg has observed hæmorrhage into the orbit in a case of scurvy-rickets, or, as it is generally named in Germany, Barlow's disease. The patient was a little girl nine months old, and the eye condition had been present for five days before Hirschberg saw the case. The right eye was markedly protruded, and there was a trace of blood visible on the eyelids. The pupil reacted, and the fundus was normal. The child was pale, and subject to headsweats. There was a hæmorrhage on the outer side of the right knee. The condition of the gums is not mentioned. During the course of the case some conjunctival, retinal, and cutaneous hæmorrhages made their appearance. Under suitable diet, the child made a complete recovery in seven months.

Lange.—A case of traumatic cyst of the ocular conjunctiva. (Zur casuistik der Traumatischen Cysten der Conjunctiva.) *Kl. Monatsbl. f. Augenheilk.*, XLI., II., p. 199.

Lange's case was that of a man who had injured one eye with a screw-driver. Some seven months after the accident the patient presented a yellowish, transparent, cystic tumour in the upper nasal quadrant of the ocular conjunctiva. Lange assigns the origin of the cyst to a traumatic penetration of the epithelium. Unfortunately the cyst was not examined anatomically after removal. A. BIRCH-HIRSCHFELD.

III.—THERAPEUTICS, OPERATIONS, INSTRUMENTS, AND APPLIANCES.

Panas, P.—Asepsis and prophylaxis in Ophthalmology. *Archives d'Ophtalmologie*, janvier, 1903, and *American Journal of Ophthalmology*, March, 1903.

Panas, in the course of a most interesting article, shows that antiseptic precautions of some kind in operations upon the eye

date from very early times. The fluids employed for this purpose included sea-water, rose water, decoction of Grecian hay, and honey or hot honey water. After the removal of hypopyon, the ancient Arabs recommended an injection of warm honey water into the anterior chamber. The apparent slowness of ophthalmic surgeons to adopt the teachings of Lister, was due, Panas thinks, to the irritating nature, as regards the eye, of the antiseptic at first employed, namely, carbolic acid. Antisepsis, however, found a definite place in ophthalmology as soon as the virtues of the mercuric salts became widely known. The terms " antisepsis " and " asepsis" are not opposed to one another, although the latter should nowadays be preferred.

The following represents, in brief, the aseptic measures recommended by Panas for operations upon the eye. The lids must be cleansed by soaking the skin with a pledget of cotton, sterilised boiled water, and soap. They must then be rubbed with cotton very slightly moistened with ether. The free borders of the eyelids are best cleansed by vigorous rubbing with sterilised cotton dipped in oleate of biniodide of mercury (4 : 1,000), an agent that causes little irritation, and is an absolute bactericide, if allowed to act for several hours. This region should be rendered aseptic the evening prior to an operation for cataract, and the part should be kept covered with a sterilised pad and bandage until the moment for operation. The conjunctival sac is thoroughly washed out with a watery solution of a mercuric salt, some instrument terminating in a nozzle being employed for the application. Attention must be paid to even the mildest form of dacryocystitis, a remark that applies equally to any affection of the neighbouring cavities, as the naso-pharynx and the various sinuses. Maxillo-dental lesions, also, must not be overlooked. Every collyrium must be perfectly aseptic, and as little irritating as possible. In this latter respect nothing surpasses the oily solutions of the alkaloids. Operators and assistants must wash their hands with soap and water, brush them well with a scrubbing brush, and immerse them in a mercuric or phenic solution. All instruments must be dipped into boiling, sterilised water, containing a little sodium bicarbonate, in order to prevent rusting. Bandages, compresses, and silk sutures must be sterilised by steam at a temperature of 120° for at least half an hour. Gut sutures are to be kept continuously in chloroform, or a solution of benzo-naphthol. Absorbent wool, whether in roll or pledgets, is sterilised by exposure to a temperature of 150°. The various dressings, etc., must be handed by ring-forceps just taken from boiling water. After operation, Panas immobilises

every cutaneous or corneal flap,and to this end pays the greatest attention to the even filling-up of the parts over the eye with cotton pledgets, one of which he always places in the hollow between the eye and the root of the nose. The bactericidal action of the tears (maintained by Bach, Valude, and others) remains, according to Panas, undecided.

The remainder of the article is taken up with the consideration of antiseptics in the treatment of injuries of the eye, and so forth. It may just be added that Panas attaches great importance to the employment of mercury in plastic and suppurative inflammations of the eyeball. He uses intramuscular injections of an oily solution of biniodide of mercury (4 : 1,000), of which 1 c.c. is injected daily, preferably into the buttocks.

Weill, N. J.—Intra-ocular injections of sterilised iodoform into the anterior chamber in tubercular iritis. *The American Journal of Ophthalmology*, April, 1903.

Following the example of Professor Haab, Weill tried the injection of iodoform in a case of tuberculous iritis in a man, aged 21 years, without tuberculous or syphilitic antecedents. The result was encouraging. It may be as well to add, for purposes of reference, the method of sterilising iodoform before the latter is placed in the anterior chamber : " Place the iodoform in a 3 per cent. solution of carbolic acid for forty-eight hours. Pour the acid off. Plug the receptacle with sterilised cotton ; put it in an oven with a constant temperature of 40 C. to dry." It is a little unfortunate that the diagnosis made by Weill was not confirmed bacteriologically, although this might readily have been done, since some bits of iris were removed from one eye by iridectomy.

Dalén, Albin.—Transfixion of the Iris. (Om transfixion af Iris). *Hygiea, April*, 1903.

Transfixion of the iris—an operation introduced by the late Sir William Bowman—has been used by Fuchs in seclusion pupillæ with bulging of the iris. Dalén narrates three cases operated on by this method at the Stockholm Serafimerlazaret. The first case was in an elderly woman, who had been operated upon for cataract without iridectomy. Iritis occurred, and a secondary cataract resulted. Vision—0·1. A year later the patient returned with bulging of the iris, increased tension, and quantitative vision. Dalén then performed transfixion of the iris, using a Graefe knife for the purpose. On the following day, tension was normal, and the bulging of the iris was no longer present. Vision—0·1, increased later to 0·25. The second case was one of glaucoma coming on after the

discission of a secondary cataract. Iridectomy was tried, but did not succeed, owing to a prolapse of the vitreous humour. Glaucomatous symptoms reappearing, transfixion was done, after which tension fell to normal, and the patient could see fingers at a distance of from one to two metres. The third case was one of secluded pupil due to old sympathetic ophthalmitis. There was bulging of the iris, increased tension, and vision varying from 0·2 to 0·6. After transfixion of the iris, the symptoms of glaucoma disappeared, and sight rose to 0·8.

Dalén is of opinion that transfixion is to be preferred to iridectomy in glaucoma, following needling of a secondary cataract, because it is a less dangerous proceeding. Moreover, the method should be tried in many other conditions. If it is done in an eye containing the crystalline lens, great care should be exercised, but one may avoid wounding the lens by giving the blade an inclination with the edge forward.

J. WIDMARK.

De Wecker, L.—The antiseptic tattooing of the Cornea. *Archives of Ophthalmology*, May, 1903.

De Wecker, who, as everybody knows, introduced the plan of tattooing leucomata of the cornea, points out that the finer varieties of Indian ink only should be employed for the purpose. He uses one instrument, namely, a broad needle. For years he has used a 1:2,000 sublimate solution for mixing the ink, but lately he has adopted the plan of placing the ink paste in a hot-air steriliser before applying it to the cornea.

Ahlström, Gustav.—On the wearing of an artificial eye. (Zum Prothese-Tragen.) *Centralbl. f. prak. Augenheilkunde*, October, 1903.

After discussing the disadvantages of the ordinary artificial eye, Ahlström describes a simple device for bettering the look of the prothesis. A hollow glass ball, 10mm. to 15mm. in diameter, is placed in the orbit, and over that is put a Snellen "reform" or other artificial eye. The contrivance is said to be comfortable, and to retain its place well in the orbit. The glass balls, it may be added, are made by Müller Söhne of Wiesbaden.

Goldzieher, W.—The treatment of corneal ulcers of blennorrhagic origin. (Beitrag zur Behandlung blennorrhoischer Hornhautgeschwüre.) *Klin. Monatsbl. f. prak. Augenheilk*, September, 1903.

In the course of the year 1901 Goldzieher has met with no

less than seventy-one cases of blennorrhagia in the eyes of grown-up persons. Potassium permanganate was not sufficient to obviate corneal lesions, and the author has treated ulcers of the cornea, with or without perforation, by covering them with a flap of conjunctiva dissected up for the purpose. (See OPHTHALMOSCOPE, August, 1903, page 58).

Revue générale d'ophtalmologie, octobre, 1903.

Galezowski.—Ocular therapeutics and formulary. (Thérapeutique oculaire et formulaire.) *Recueil d'Ophtalmologie*, octobre, 1903.

Under the above general heading Galezowski draws attention to a couple of important means of treating arthritic and rheumatic affections of the eye, namely, by the use of adrenaline and of asaprol. The latter remedy—a salt of B-naphtholmonosulphonic acid—is employed internally in doses of ½ to 1 gramme daily; as a collyrium containing asaprol, 10 centigr, eserine sulphate, 5 milligr., and distilled water, 10 grammes; and, finally, as compresses of 20 centigr. of asaprol to 100 grammes of distilled water.

H. DE V.

IV.—MISCELLANEOUS.

Kuwahara, Y.—Upon living leeches in the conjunctival sac of the human eye. (Ueber lebende Hirudineen im Bindehautsack des menschlichen Auges.) *Centralbl. f. prak. Augenheilkunde*, September, 1903.

Kuwahara reports two cases where living leeches were found in the conjunctival sac in natives of Japan. In the first case, which occurred in a man, 18 years of age, a black foreign body was seen near the outer canthus of one eye. Upon examination, a leech, 2.7 cm. in length, was found to be attached to the upper cul-de-sac by means of its suckers. Some little difficulty was experienced in removing the creature until cooking salt had been applied to its head. The second case was met with in a girl, 10 years of age, who suffered from photophobia, lacrymation, and slight pain in one eye. A leech, 2 cm. long, was removed from the lower cul-de-sac. The conjunctiva was inflamed, and showed several scars.

Bocci, D.—A case of acute poisoning by aniline oil. (Sopra un caso di avvelenamento acuto da olio di anilina.) *Archivio di Ottalmologia*, V. X, fas. 7 and 8, 1903.

Cases of poisoning by aniline oil are very rare. As regards nitro-benzol, employed in aniline factories, that product is

less dangerous than dinitro-benzol, used in the manufacture of roburite, an explosive employed in mines. Nitro-benzol and dinitro-benzol may give rise to grave symptoms, as cyanosis, vertigo, anæmia, headache, blood changes, etc., associated with ocular symptoms, such as those described by Nieden, Simeon Snell, Pockley, and Uhthoff.

Bocci's case occurred in a dyer of 35 years, who became acutely intoxicated after having decanted aniline oil during the whole of one morning. When examined about twenty days afterwards, vision was found to be reduced to ½ normal, there was a considerable limitation of the visual field, and complete dyschromatopsia. Ophthalmoscopically, the optic discs were soft-edged, the retinal veins dilated, and the retinal arteries shrunken. The diagnosis was made of optic neuritis with incomplete temporal hemianopsia, due to a lesion involving the chiasma. Cure was complete at the end of several weeks, despite some residual pallor of the optic discs.

Aniline oil, as the author points out, results from a mixture of amido-benzol and metaparaorthotuloïdine in variable proportions, and this, combined with impurity of the products, individual differences, and so forth, explains the variety of the phenomena and the greater or less frequency of the intoxication. A. Antonelli.

Fleischer, B.—Two further cases of greenish colouration of the cornea. (Zwei weitere Fälle von grünlicher Verfärbung der Cornea.) *Klin. Monastbl. f. Augenheilkunde*, 1903.

Kayser, it may be remembered, has recently (*Klin. Monatsbl. f. Augenheilk.*, XL, 2, *p.* 22, 1902) described a curious case of congenital discolouration of the cornea. The periphery of the cornea was of a greenish hue, and upon using a magnifying glass, this was seen to be due to a number of yellowish spots lying partly behind and partly in front of the membrane of Descemet. Two further cases of the same kind are now published by Fleischer. The discolouration occurred towards the periphery of the cornea under the form of brownish-green dots, which became smaller the nearer they approached the centre of the cornea. One patient suffered from multiple sclerosis, and the other from general nervous manifestations.

Lodge, Samuel.—A case of thrombosis of the cavernous sinuses. *Journal of Laryngology, Rhinology, and Otology*, July, 1903.

Lodge gives a careful account of a case of thrombosis of the cavernous sinuses occurring in a woman, 41 years of age.

The earlier symptoms included neuralgia of one side of the face and forehead, abscess in one tonsil, œdema of both lids and conjunctiva, and some rise in bodily temperature. When examined by Lodge, both eyeballs were thrust forward and their movements were markedly limited, the eyelids and conjunctiva were red and œdematous, and there were no gross changes in the fundus. The root of the nose was œdematous, as were also the parts over the pterygoid and malar regions. Pus was oozing from the socket of one molar tooth ; the left tonsil was swollen and reddened ; and there was a swelling on the left side of the palate. Temperature, 102°F. Antistreptococcic serum was injected, without any re-action. On the sixth day after admission, a quantity of pus was evacuated from the palate, and drainage established by passing a tube through the soft palate behind the ramus and out through an incision at the angle of the jaw. Five days later, pus was let out from both orbits. The patient died 20 days after admission and 54 days after the beginning of the illness. The *post-mortem* examination revealed diffuse, purulent lepto-meningitis, a collection of pus over each frontal plate, caries of the cavum sellæ, and septic thrombosis of the cavernous and of some other sinuses.

Wiener, Meyer.—Fatal hæmorrhage from the conjunctiva in the new-born, with report of case. *The American Journal of Ophthalmology*, March, 1903.

Two drops of a 2 per cent. solution of silver nitrate were instilled into each eye of a baby immediately after birth, a prophylactic measure rendered necessary because the mother was suffering from gonorrhœa and chancroids. On the following morning, the baby's eyelids, face, and pillow, were found to be covered with blood. The bleeding had been first noticed one hour after birth. Wiener saw the case about ten hours after birth, and found the palpebral conjunctiva coated with a white membrane, due apparently to a slough of the epithelial layer. He prescribed adrenaline chloride (1 in 3,000), and iced water applications. On the following day a slow oozing from the conjunctiva was still present. A 1 to 1,000 solution of adrenaline was therefore prescribed, and a tight compressive bandage applied over the lids. Next morning bandage and pillow were again soaked with blood. No ulceration or abrasion was to be found, and the blood seemed to come from the entire surface of the conjunctiva. The eyelids were then rubbed with stick alum, but without effect as regards the bleeding. Pure adrenaline chloride was applied. Next day the conjunctival sac was washed out with a solution of gelatine, which appeared to check the hæmorrhage. The latter, however, recurred, and as the baby was becoming

extremely anæmic, normal salt solution was injected *per rectum*. Other measures, including the administration of calcium chloride, were tried, but the baby died six days after birth. A *post-morten* examination showed the organs to be normal, and no internal hæmorrhages to be present. Microscopical examination of the conjunctiva showed nothing abnormal. Wiener believes that the use of silver nitrate was the immediate cause of the conjunctival hæmorrhage, although he admits also a pre-disposition of the child to bleed. It is perhaps a little unfortunate that nothing whatever is said with regard to the presence or absence of syphilis.

Corda, G.—An interesting case of acute Iodism, with anterior polar opacity of the crystalline lens. (Interessante caso di iodismo acuto, con apacamento polare anteriore del cristallino). *Annali di Ottalmologia*, 1903, fas. 5-6, p. 277, 283.

After having recalled the experimental work of various authors on toxic cataract, Corda relates the case of a man, aged 43 years, affected with acute iodism, who presented for about a week a slight opacity of the anterior layers of the crystalline lens. Sight was reduced to 2/60. At the end of about a fortnight vision had become normal and the media perfectly clear.

A. Antonelli.

Kipp, Charles J.—The mental derangement which is occasionally developed in patients in Eye-Hospitals. *Archives of Ophthalmology*, July, 1903.

Kipp gives details of ten cases where psychoses came on in patients whose eyes had been wounded, surgically or as the result of accident. He adds particulars of two cases where similar symptoms supervened in patients confined to hospital by reason of ulcerative keratitis. Some of these patients occupied darkened rooms ; others were treated in cheerful and well-lighted rooms. Some were in bed, but others were sitting or walking about the wards. One of Kipp's patients only had both eyes bandaged at the time mental symptoms developed. A solution of atropine had been used several times a day in most of the cases, but in a few no mydriatic of any kind had been used before the mental attack. None of the patients were drunkards ; indeed, some were total abstainers from alcohol. Males predominated, and the majority of the sufferers were over fifty years of age. Recovery was swift when patients could be sent back to their own homes. Improvement was secured, also, by letting the members of their household stay with them and by transferring them to other

quarters. Kipp concludes that the "psychoses were the result of a change in the patient's environment and to an increasing longing to get away from the new surroundings." It is significant that the author has never seen mental disturbances in those operated upon or treated at their own homes. In the management of this form of *nostalgia*, as Kipp calls the condition, restraint and hypnotics are needed. The quickest way to restore mental equilibrium, however, is to return the patient to his home, or if that is not possible, to transfer him to another house, or to another room, and to let him have the company of some members of his own household.

Enslin, Dr.—Diagnostic value of old Tuberculine in Parenchymatous Keratitis. *Deutsche Med. Woch.*, 1903, No. 8.

At the instance of Professor Uhthoff, Enslin injected all (24) cases of parenchymatous keratitis which came to the Breslau clinic during the last few months, without exception, with tuberculine. In all cases (save one which was not clear) in which no re-action followed, hereditary lues could be proven, and in those which re-acted typically, other signs of tuberculosis could be found. Enslin advocates tuberculine injections, which, with proper care, are harmless, in doubtful cases as a diagnostic means.

Annals of Ophthalmology, April, 1903, p. 263.

NOTES AND ECHOES.

The President of the Ophthalmological Society.

THE Address of the President of the Ophthalmological Society comes with especial force, inasmuch as Mr. John Tweedy couples, during the forthcoming year, the position mentioned, with the distinguished position of President of the Royal College of Surgeons of England. His philosophical address dealt with the relations of ophthalmology to general medicine and surgery and to public health. The wide bearing of this thesis renders it almost hopeless to attempt an adequate discussion within the four walls of a formal address. Apparently recognising that fact, Mr. Tweedy concentrated his main attention upon one or two points, notably the inwardness of scientific specialism and the optician question. With regard to the first-mentioned point, he raised the oft-needed note of warning against treating the eye as a

thing apart from general medicine and pathology. That narrowing influence was more and more apparent in the tendency in some quarters to split ophthalmology into two parts—to wit, the optical, and the medico-surgical. Mr. Tweedy insisted upon the absolutely inseparable nature of the two things, which became more apparent with every fresh scientific discovery. His emphatic conclusion was that optical defects of the eye can never be safely or satisfactorily treated apart from knowledge of the diseases of that organ, and of their relation to the morbid processes of the body as a whole. And so by easy stages Mr. Tweedy led up to his onslaught on the sight-testing and prescribing optician, or "ophthalmic optician," or "optologist," or whatever other fanciful name he may have taken unto himself. To say that he smote this new-fangled species of charlatan hip and thigh, would be to put the matter mildly. Most of our readers have already had the pleasure either of reading or of actually hearing Mr. Tweedy's condemnation of that most curious hybrid—the spectacle quack. We trust his plain-spoken warning will reach the public, and that we shall never more see any members of the medical profession trafficking with this unclean thing, as, unhappily some of them have done in the past.

* * * *

The Royal College of Surgeons.

THE opinion of the English College of Surgeons has been conveyed to the Spectacle Makers' Company in answer to a request from that body to criticise the proposed alterations in its diploma. The alteration, as readers know, is to include the subject of sight-testing in their examinations, and to extend their diploma by certification of efficiency therein. The gist of the answer of the College lies in the view that "it is against public safety and welfare that anyone should be deemed competent to order or prescibe any medical or surgical remedy or appliance, who has not had an efficient medical and surgical training." Among other arguments advanced in support of that proposition is the unanswerable one that in many grave affections of the eye, both local and constitutional, the earliest and most obtrusive symptom is impairment of sight. Naturally both patient and optician will attribute the failure of sight to old age or other defect that can be remedied by spectacles. The mistake, which may involve loss of sight, is found out later, by consulting an ophthalmic surgeon. The Spectacle Makers' Company want to put the cart before the horse. The appropriate and logical order of the procession should be from the house of the ophthalmic surgeon to the shop of the optician. If we mistake not, the law says so, too. The City Company wants to put the optician first, *mais nous verrons*.

Mr. R. Brudenell Carter.

THE retirement of Mr. R. Brudenell Carter from active practice will leave a gap not only in the ranks of ophthalmologists, but also in the wider medical world. It has been given to few men to lead a more varied and distinguished career. Mr. Carter became M.R.C.S. of England in 1851, and F.R.C.S. in 1864. After serving in the Crimea with the local rank of Staff-Surgeon in 1855–6, he settled in London in 1868, and was elected Surgeon to the South London Ophthalmic Hospital (now Royal) in 1869, a post which he resigned later, in consequence of the then unfitness of the building for medical purposes. His chief appointment came in 1870, when he was appointed Ophthalmic Surgeon to St. George's Hospital, a connection which was not broken until his retirement as Consulting Surgeon in 1893. From 1886 to 1898, Mr. Brudenell Carter sat as a member of the General Medical Council. He was an original member of the Ophthalmological Society, from which he retired, however, on account of the attitude of the Society towards the homœopathists. In 1876 he was President of the Ophthalmological Section of the International Medical Congress in Philadelphia, and a Vice-President of the International Ophthalmological Congress at New York in the same year. Space does not permit us to recount the learned societies with which Mr. Carter has been connected. As a writer, he is endowed with a rare literary faculty, which he combines with the power of keen and incisive oratory. For many years he was on the staff of the *Times*. One of his best-known articles was an article in the *Contemporary Review* in answer to a slanderous attack on the London medical students in the *Fortnightly Review*, under the editorship of Mr. John Morley. His chief contribution to ophthalmological science was perhaps his "Practical Treatise on Diseases of the Eye."

The following has been communicated by one who enjoyed a long and close personal and professional relationship with Mr. R. B. Carter:

AN eminent ophthalmic surgeon, Mr. R. Brudenell Carter, has just retired from the active practice of his profession. He has been conspicuously before the public and the profession for many years, and has contributed largely to medical, surgical, and literary research, earning for himself a wide and worthy reputation, and a name held in honour by his compeers and the public. While practising in Nottingham, he (with the late Sir Tindal Robertson, M.D.) founded the Nottingham and Midland Eye Infirmary. It is given to few men to write and to speak so well and successfully as Mr. Carter, and those who know him best like him most, and will always regard him as an ornament of his profession. A man of his

varied acquirements must always remain, in many senses, an active man.

* * * *

Home and Hospital for Ophthalmic Children.

THE *Observer* of November 1st contains a notice of a forthcoming bazaar on the 26th and 27th November, at the Great Central Hotel, in aid of the Home and Hospital for Ophthalmic Children, Portobello Road, Notting Hill. This is the second bazaar held for the benefit of that particular charity. It is hardly necessary to say we fully sympathise with the movement in question, but it is to be regretted that the *Observer* adds to "Ophthalmic Children" the qualification "of all denominations." The Home certainly was founded originally for the benefit of Roman Catholic children, and was one of several such institutions as the direct outcome of Mr. Sydney Stephenson's Government Report on *Ophthalmia among the Poor Law children of the Metropolis* (1897). The error in description—assuming it to be such— is somewhat serious.

* * * *

The School Board for London.

THE London School Board do nothing by halves. After long pondering it has come upon them that the eyesight of school children demands skilled supervision in any proper system of public education. Whereupon they have forthwith swamped the eye hospitals and the eye departments of general hospitals with a flood of school children sent thither to have their sight tested. This proceeding naturally throws a grievous burden upon the already over-worked surgeons and their assistants. The present machinery of the London Board is adequate to detect certain gross defects of sight, and consists of simple tests carried out in the first place by teachers and supervised by half a dozen oculists who receive a miserable pittance for their work. Clearly, something more is wanted. It might be desirable to establish in various convenient parts of London what may be called "Refraction Bureaux," each presided over by a properly remunerated and skilled medical specialist. The children could then be sent when necessary to the nearest bureau, at the hour and day most convenient to the School Authorities. The present system throws a really intolerable burden upon the hospitals, among which the London Hospital has with characteristic promptitude made haste to establish its claim as the chief sufferer. Then again, it is no use finding out errors of sight unless spectacles are forthcoming when wanted, a point which affects the pocket of poor parents. Some scheme will have to be adopted with a view of providing out of the public purse either a part or the whole of the cost of the spectacles. The Surgical Aid

Society has done a good deal in that direction, for during the past twelve months it has given no less than 2,708 pairs of spectacles to the poor. It would be, perhaps, better to augment the funds of the excellent Society mentioned rather than to found a new "Spectacle Society," the idea for which has been mooted.

* * * *

The Nettleship Prize.

It will be remembered by readers that upon Mr. Nettleship's retirement from active practice a year or two back, his friends and admirers determined to found a suitable memorial of his services to scientific medicine. Accordingly, a subscription list was started, and a sum collected of some hundreds of pounds, which is to be devoted to the advancement of ophthalmic work. The fund has been entrusted to the Ophthalmological Society, who have appointed three trustees. They have determined to devote the interest of the capital sum annually to the purchase of a Gold Medal to be bestowed upon that British subject who has done the most scientific work during a preceding period of one or several years. The final details of the award are still engaging the attention of the Ophthalmological Society.

ANSWERS TO CORRESPONDENTS.

Dr. Antonelli (Paris).—Abstracts safely received.

Dr. D. S. Sager (Ontario, Canada).—The contents of yonr letter have been much appreciated.

A. B. C. (London).—The matter you mention was touched upon last month in our "Notes and Echoes."

Dr. Darier (Paris).—We shall await an answer to our questions.

Dr. A. Stephenson (London).—Incorporated in present issue.

Dr. W. E. Thomson (Glasgow).—We shall publish some of the abstracts in our next number.

Dr. D. Walsh (London).—We shall be glad to open up our columns to the suggested correspondence.

Opticus (London).—You will probably find what you want in the trade journals.

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The book is singularly free from clerical blunders, is written in a clear and attractive way, and is illustrated by many diagrams and several plates. We consider that Mr. Clarke has produced a useful and trustworthy book, and one that we can cordially recommend to students and practitioners alike.—*The Ophthalmoscope.*

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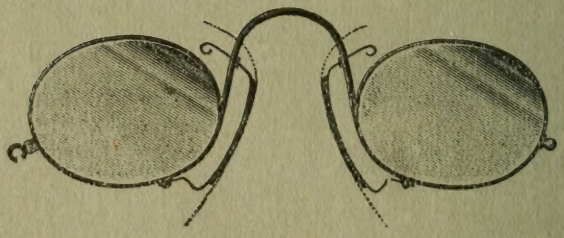

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